

FIG. 1A

## ClustalW Formatted Alignments

## FIG. 1B

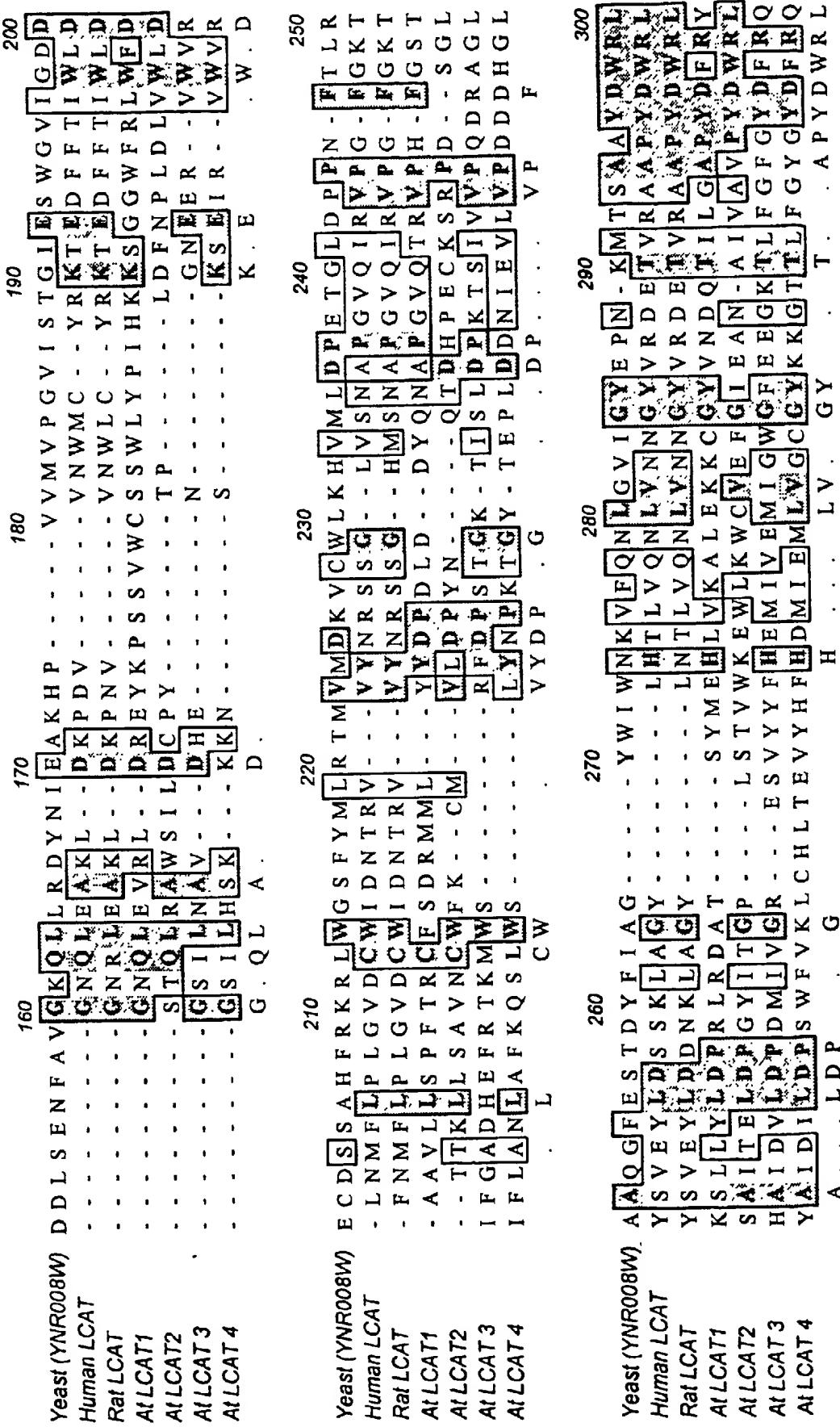
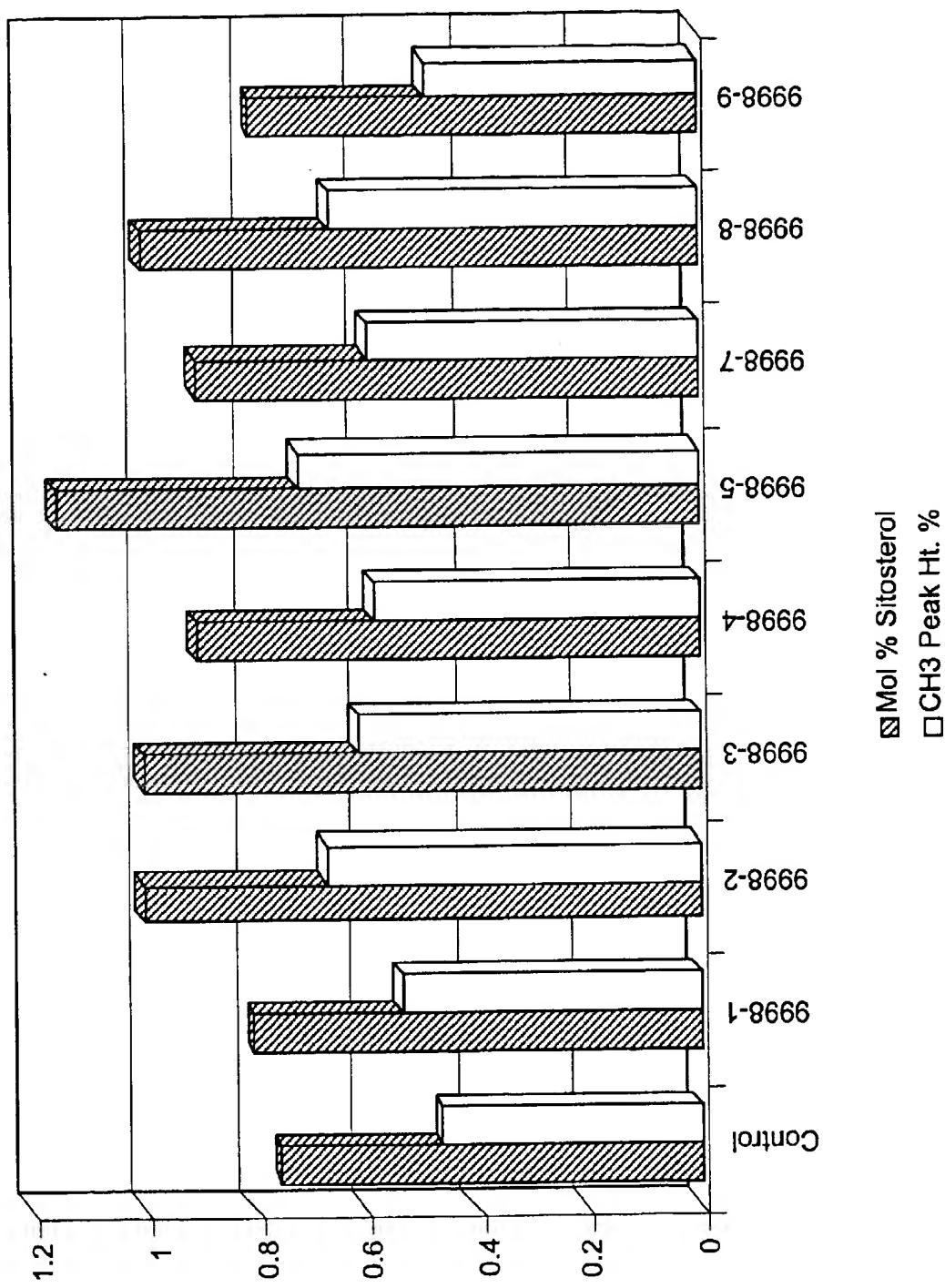


FIG. 1C

350	Yeast (YNR008W)	A Y - - - - L D L E R R D D E R Y F T K L K E Q I E L F H Q L S C - E K V C L I G H S M G S Q I I F Y F	Human LCAT	E P - - - - G Q Q E E Y Y R K L A G L V E E M H A A Y G - K P V F L I G H S L G C L H V L H F
360	Yeast (YNR008W)	M K W V E A E G P L Y G N G G R G W V N E H I D S F I N A A G T L L G A P K A V P A L I S C E M K D	Human LCAT	L L R - - - - Q P Q A W K D R F I D G F I S L G A P W G G S I K F M L V L A S G D N - -
370	Yeast (YNR008W)	M K W V E A E G P L Y G N G G R G W V N E H I D S F I N A A G T L L G A P W G G S I K F M L V L A S G D N - -	Rat LCAT	E L L R - - - - Q P Q S W K D H F I D G F I S L G A P W G G S I K F M R I I A S G D N - -
380	Yeast (YNR008W)	M K W V E A E G P L Y G N G G R G W V N E H I D S F I N A A G T L L G A P W G G S I K F M L V L A S G D N - -	At LCAT1	L N R - - - - T T P S W R R K Y I K H F V A L A P W G G T I S Q M K T F A S G N T - -
390	Yeast (YNR008W)	M K W V E A E G P L Y G N G G R G W V N E H I D S F I N A A G T L L G A P W G G S I K F M L V L A S G D N - -	At LCAT2	D Y . . K L K . . N R I D L I L G L K K L E T A Y K R S C G R K Y T I S H S M G E M N S C C F
400	Yeast (YNR008W)	M K W V E A E G P L Y G N G G R G W V N E H I D S F I N A A G T L L G A P W G G S I K F M L V L A S G D N - -	At LCAT3	D Y . . K L K . . N R I D L I L G L K K L E T A Y K R S C G R K Y T I S H S M G E M N S C C F
410	Yeast (YNR008W)	M K W V E A E G P L Y G N G G R G W V N E H I D S F I N A A G T L L G A P W G G S I K F M L V L A S G D N - -	At LCAT4	D Y . . K L K . . N R I D L I L G L K K L E T A Y K R S C G R K Y T I S H S M G E M N S C C F
420	Yeast (YNR008W)	M L Q T W G G I F S M L P K G - - E E V I W G D M	Human LCAT	T I Q L N T L A M Y G L E K F F S R I E R V K - - M L Q T W G G I F S M L P K G - - E E V I W G D M
430	Yeast (YNR008W)	M L Q T W G G I F S M L P K G - - E E V I W G D M	Rat LCAT	Q G I P I M S S I K L K E - - E Q R I T T S P - - E E V I W G D M
440	Yeast (YNR008W)	M L Q T W G G I F S M L P K G - - E E V I W G D M	At LCAT1	Q G I P I M S N I K L R E - - E Q R I T T S P - - E E V I W G D M
450	Yeast (YNR008W)	M L Q T W G G I F S M L P K G - - E E V I W G D M	At LCAT2	Q G I P I M S N I K L V R R - - H Q R T S E S N Q - - D N T S W T H F
			At LCAT3	L P V S - - E G T A R I L S N S F A S S L W L M P F S K N C K G - - C P S I Y E L M C C P Y F K W E L P
			At LCAT4	S - F V - - N G W E Q N F F V S K W S - - M H Q L L I E C P S I Y E L M C C P Y F K W E L P

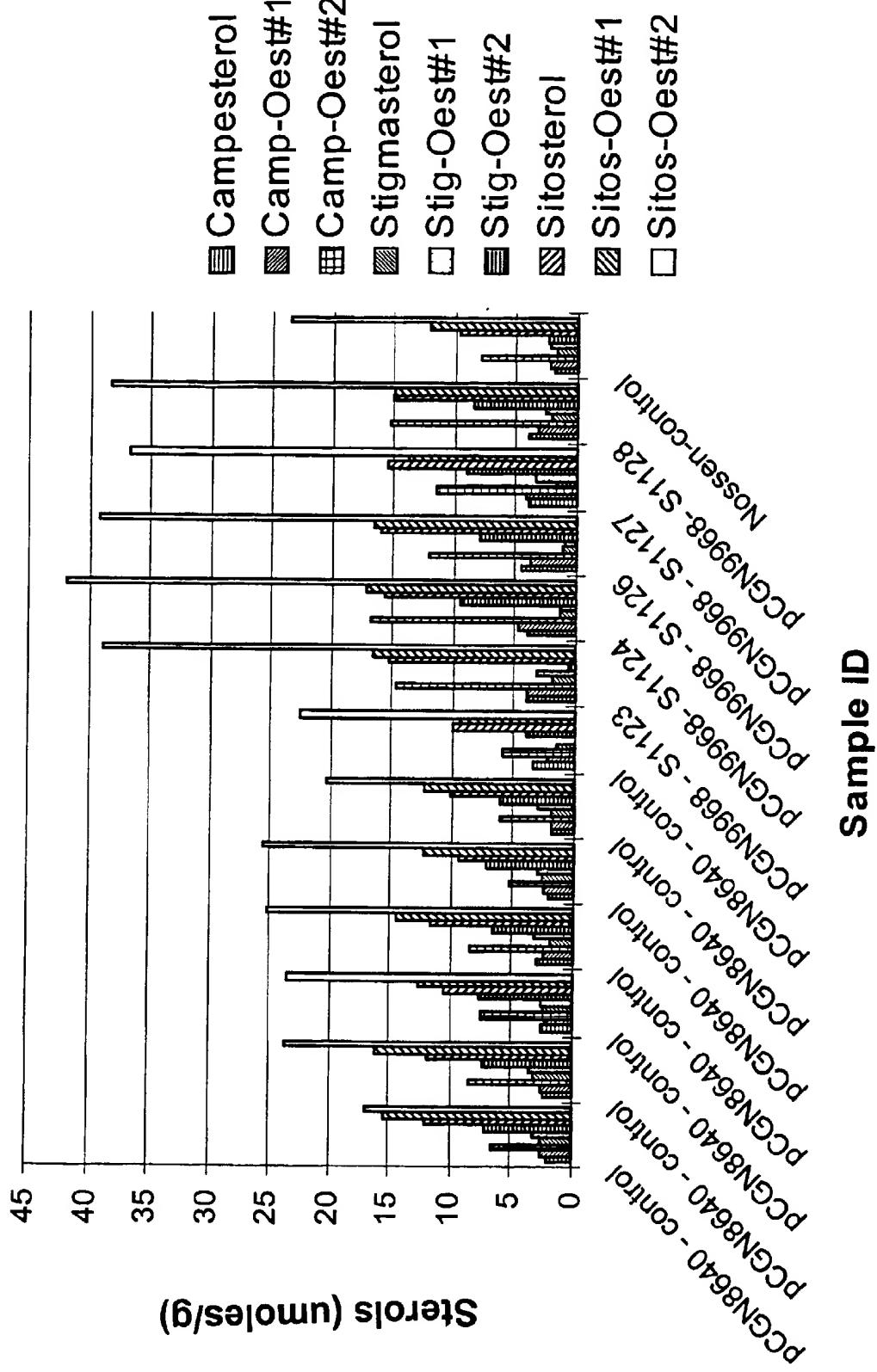
FIG. 2



8N8

FIG. 3

Sterol Distribution



**FIG. 4**

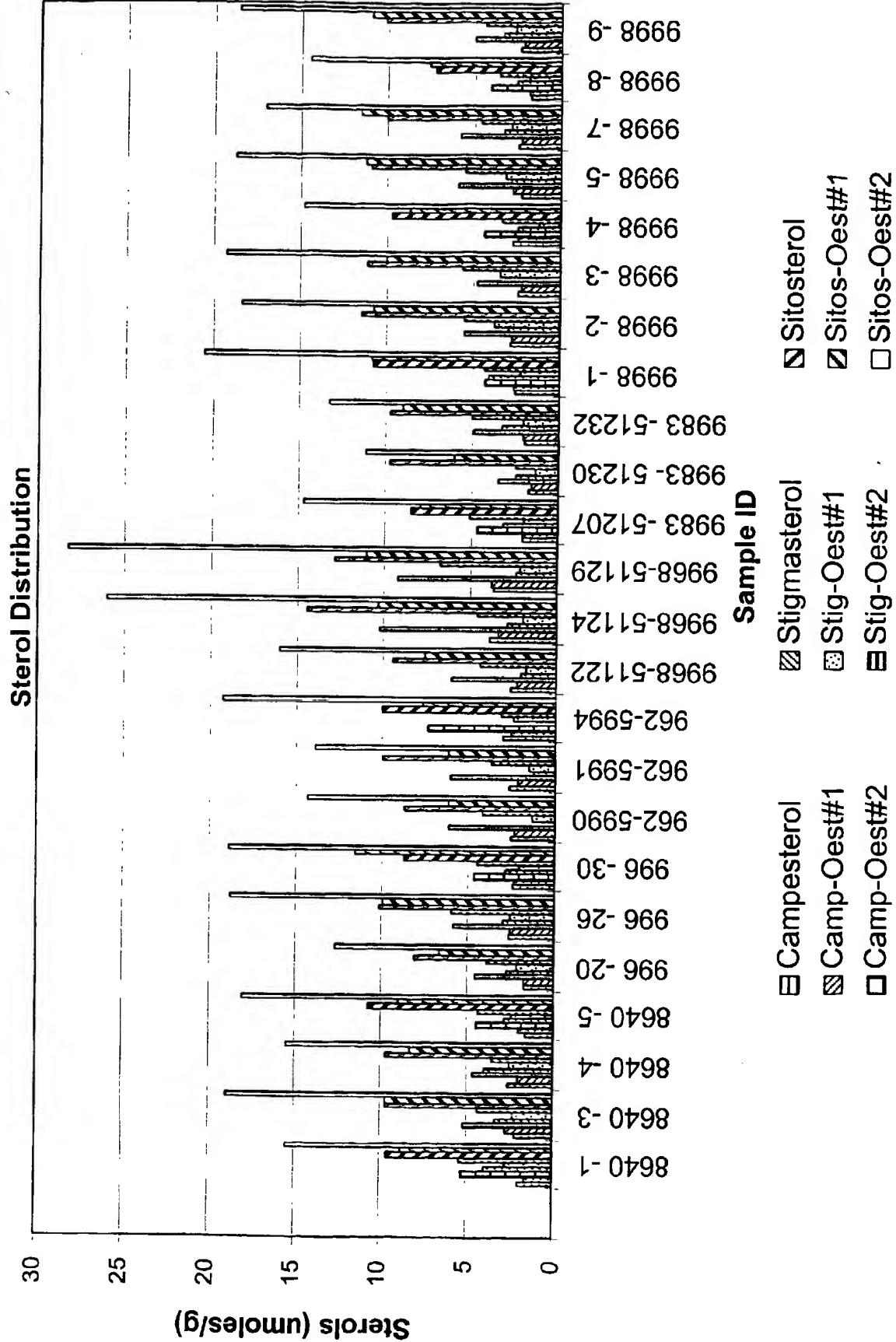
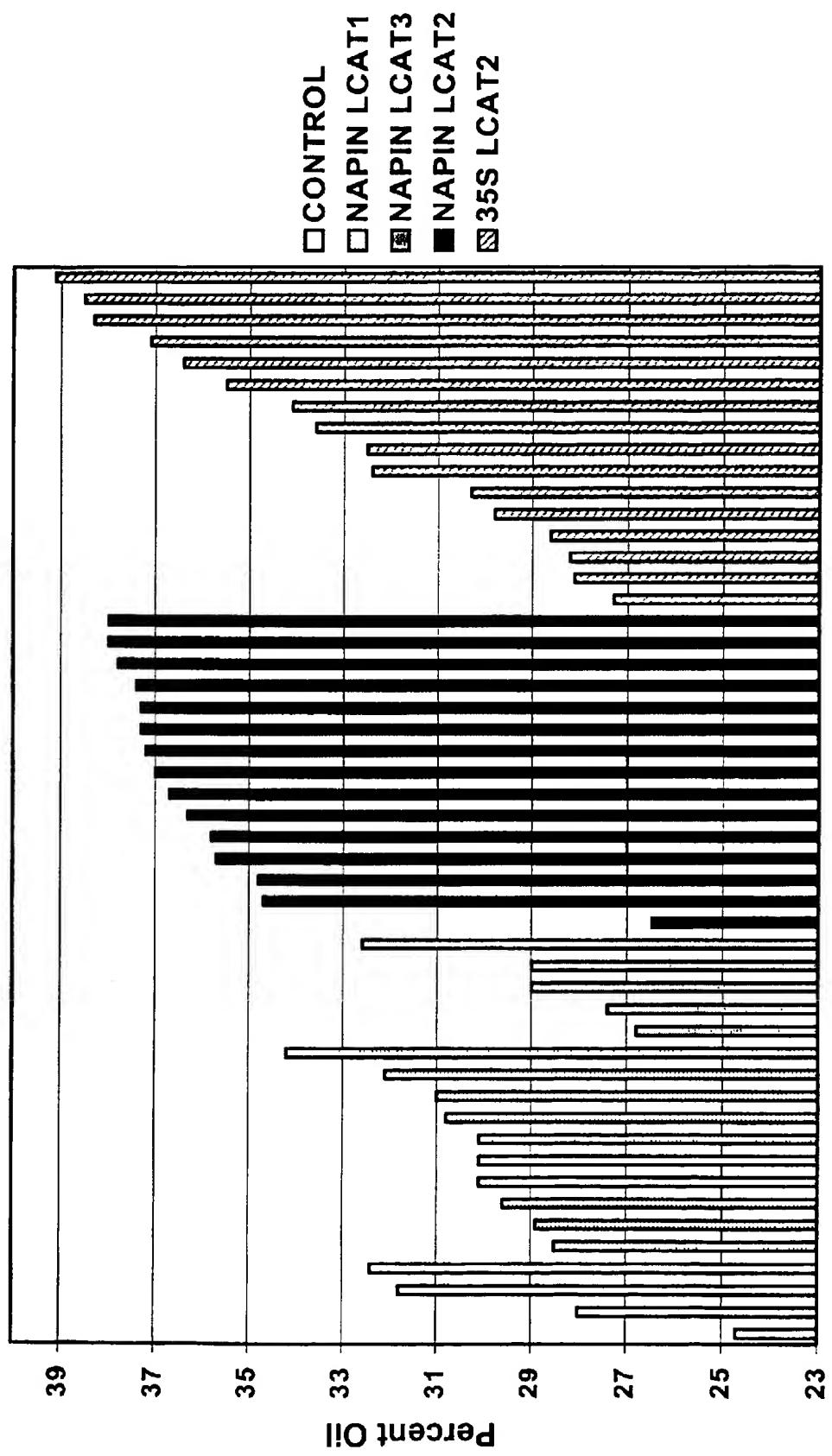


FIG. 5

NIR Analysis of LCAT



8A 16 05